



Active RoofTops
South Europe

CASE STUDIES FACTSHEETS **Italy**



This project has been funded by various national research and development agencies under the Driving Urban Transitions Partnership, which is co-funded by the European Commission.



LA PISTA 500

Torino, Italy

Area: 7.000 m²



Source: Architect, credits: Marco Schiavone courtesy of Benedetto Camerana

Building Typology

Listed Public Building (former Fiat car factory). Retrofitted and inaugurated in 2022

Roof Type

Flat, publicly accessible roof and historic car test track

Rooftop Intervention

Biodiversity park, art route, recreation and active vehicle-testing circuit

Intervention Overview

La Pista 500 reinterprets the celebrated rooftop test track of the former FIAT Lingotto factory as a public biodiversity park while retaining its automotive function. More than 40,000 native plants are arranged in large specialised containers along the 7,000 m² route. Visitors can walk through an open-air art programme linked to the Pinacoteca Agnelli and use areas for meditation, fitness, yoga and running, while portions of the circuit continue to support testing of new electric vehicles. The roof therefore combines heritage, landscape, culture, recreation and mobility within one continuous public experience. Specialised low-maintenance containers and controlled drainage protect the historic structure while supporting seasonal planting and stormwater management.

Why this Case matters

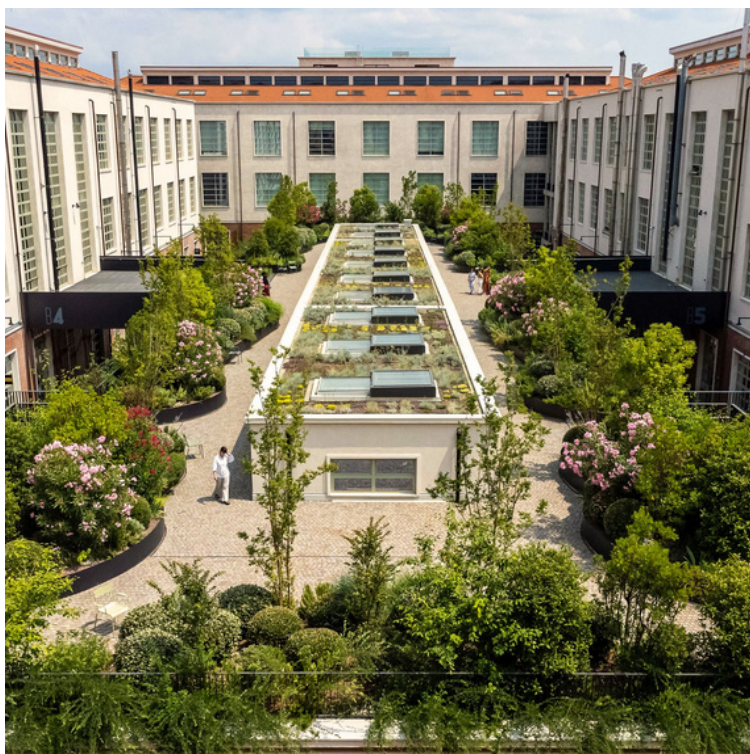
An exemplary heritage transformation where biodiversity, recreation, culture and electric mobility coexist without erasing the identity of an iconic industrial roof.

Key Features

- Large low-maintenance planted containers protect the historic roof fabric.
- Native species create seasonal habitat and a visible urban green space.
- Restored track remains active for electric-vehicle testing.
- Drainage and substrate design supports controlled stormwater management.

FORMER MANIFATTURA TABACCHI

Florence, Italy
Area: 560 m²



Building Typology

Public accessible. A decommissioned industrial tobacco factory complex originally designed in Rationalist style by Pier Luigi Nervi in 1930s and reconverted into a mixed-use neighborhood including residences, lofts, offices, and cultural spaces.

Roof Type

Multiple common and private green roofs and pocket terraces

Rooftop Intervention

Extensive and intensive planting, public hanging forest and residential gardens

Intervention Overview

The former Manifattura Tabacchi is being transformed from a 16-building industrial complex into a mixed neighbourhood of homes, workplaces and cultural spaces. Rooftops are used at several scales, from private loggia gardens and panoramic residential terraces to the public Officina Botanica on Building B11. This 560 m² 'hanging forest' contains 96 trees and about 1,300 shrubs. Intensive planting, permeable paving and continuous drainage create a substantial elevated landscape while low-water, low-maintenance species are intended to improve air quality and reduce the visual hardness of the former factory. The wider redevelopment also includes extensive sedum roofs, tree-intensive areas, pedestrian zones and private rooftop gardens across multiple buildings.

Why this Case matters

A district-scale regeneration model using varied rooftop landscapes to combine public space, private amenity, biodiversity, air-quality goals and industrial heritage.

Key Features

- Public and private rooftop landscapes distributed across several buildings.
- B11 Officina Botanica combines trees, shrubs and accessible public space.
- Planting selected for low water demand and pollutant-filtering potential.
- Selected buildings target BREEAM Excellent performance.

GREEN ROOF ALLIANZ

Trieste, Italy
Area: 11,600 m²



Source: Harpo Verdepensile – Green Roof Allianz – Trieste; Genius Loci Architecture.

Building Typology

Postmodern corporate office complex (Allianz Italian Headquarters) undergoing deep retrofitting.

Roof Type

Multi-level podiums and terraces - 11,600 m² total

Rooftop Intervention

Intensive and extensive planting for work, events and childcare

Intervention Overview

The Allianz headquarters retrofit uses green roofs as a major component of a wider architectural transformation. Across approximately 11,600 m², different systems respond to different loads, access requirements and user groups. A 3,000 m² podium above parking is planted with low-water native species; a reinforced event area supports fairs and demonstrations; 2,600 m² of non-accessible terraces provide a Mediterranean planted outlook for offices; and around 6,000 m² surrounding the company nursery combines medium-sized trees with lower planting. Together, these areas improve thermal performance, workplace outlook, biodiversity and the quality of shared outdoor space across the headquarters.

Why this Case matters

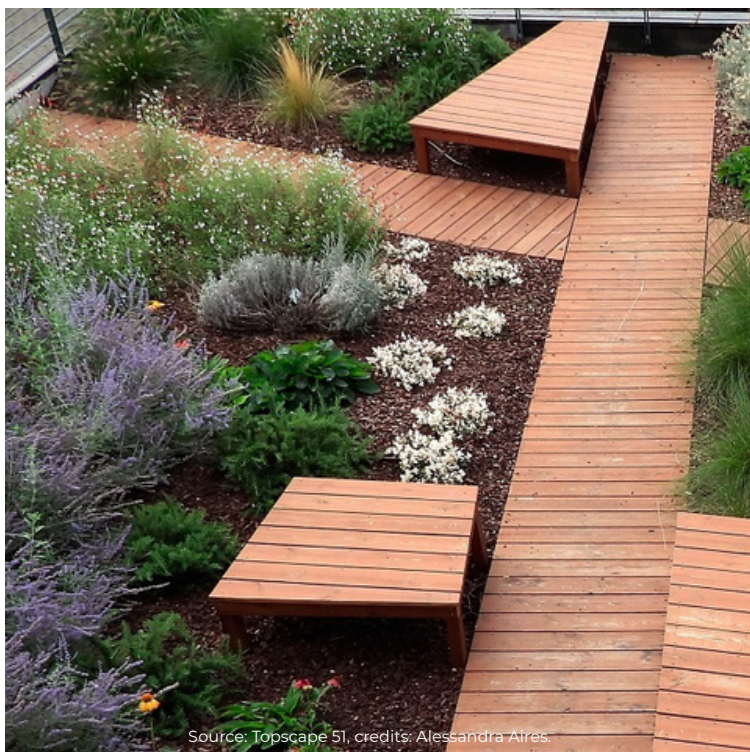
A large corporate retrofit showing how different green-roof systems can respond to workplace, event, childcare, ecological and maintenance requirements within one estate.

Key Features

- Podium planting mitigates solar heat above parking structures.
- Reinforced green area accommodates temporary events and demonstrations.
- Non-accessible terraces provide ecological value and visual amenity for offices.
- Nursery landscape combines trees and low vegetation around childcare facilities.

OPEN 011 CASA DELLA MOBILITÀ GIOVANILE E DELL'INTERCULTURA

Torino, Italy
Area: 200 m²



Building Typology

Listed Public Building '40s (former factory), Retrofitted for the Winter Olympic Games 2006

Roof Type

Flat – Accessible terraces

Rooftop Intervention

Intensive roof garden, aeroponic greenhouse, rainwater harvesting and rain-garden overflow management

Intervention Overview

Open 011 combines several water-sensitive interventions within a compact public building. The accessible roof garden improves thermal insulation and adds vegetation to a converted industrial structure. An aeroponic greenhouse grows plants without soil, using recovered rainwater delivered as a fine mist, while a rain garden at the entrance manages excess water at ground level. Together, these elements link rooftop capture, water reuse, planting and visible public demonstration rather than treating each as an isolated technical measure. Delivered through the City Water Circles programme, the project demonstrates circular water management through connected, visible and educational building interventions for municipal staff, users and visitors alike.

Why this Case matters

A clear small-scale example of circular water management, connecting rooftop capture, rainwater reuse, cultivation, drainage and public environmental education.

Key Features

- Green roof provides thermal buffering and additional planted surface.
- Aeroponic cultivation reduces reliance on soil and reuses captured rainwater.
- Entrance rain garden receives and manages excess water.
- Public youth and intercultural functions support education and demonstration.

CASCINA VAL DEL PRETE

Priocca, Italy



Source: Harpo Verdepensile. Photo credits: Jürgen Eheim e Acme

Building Typology

Former precast concrete barn used for livestock and agricultural storage within a winery estate.

Roof Type

Two-pitch sloped roof with sheds.

Rooftop Intervention

Sloped Green Roof System (Extensive Wild Meadow)

Intervention Overview

At Cascina Val del Prete, a former livestock and storage barn has been integrated into the vineyard landscape through an extensive meadow roof. The Harpo sloped green-roof system follows the two-pitch geometry and creates the impression that the surrounding terrain continues across the building. The intervention addresses both visual impact and indoor environmental stability: the planted build-up reduces exposure of the roof surface and helps moderate temperature variation inside the former industrial-style structure. The extensive wild-meadow planting was selected to require limited maintenance while reinforcing the winery estate's broader ecological transition. It also protects the underlying roof from direct solar exposure and weathering.

Why this Case matters

The project demonstrates how sloped extensive roofs can reduce the visual impact of rural production buildings while improving thermal stability and landscape continuity

Key Features

- Vegetated system adapted to inclined roof planes and shed geometry.
- Wild-meadow character connects the building to surrounding agricultural land.
- Extensive approach limits intensive gardening and maintenance requirements.
- Roof forms part of the winery estate's broader ecological transition.



Active RoofTops
South Europe

CASE STUDIES FACTSHEETS

WP1: Setting the Scene, Co-Design and Consultancy Package.

D1.1A: Regulatory and Technical Landscape on Rooftop Design and Installation. Executive Summary.

Authors: Marina Pasia, Ilaria Geddes, Michalis Psaras, Larissa Ribeiro Cunha, Raquel Guerra Aragonez, Riccardo Urbano, Veronika Antoniou

Italy case study: Riccardo Urbano

Design credits: Marina Pasia

Disclaimer: The material of the project reflects only the author's views. The European Commission's support for the production of this publication does not constitute an endorsement of the contents, which reflect the views only of the authors, and the Commission or the Driving Urban Transitions (DUT) Partnership cannot be held responsible for any use which may be made of the information contained therein.

© aRTes Consortium, 2026

CONSORTIUM



COOPERATION PARTNERS



This project has been funded by various national research and development agencies under the Driving Urban Transitions Partnership, which is co-funded by the European Commission. In addition, the project EP/DUT/0923/0063 is implemented under the programme of social cohesion "THALIA 2021-2027" co-funded by the European Union, through Cyprus Research and Innovation Foundation.

